STANFORD UNIVERSITY

DEPARTMENT OF BIOLOGY

STANFORD UNIVERSITY, CALIFORNIA

Botan. Robbins Dodge

March 13, 1941

Sept. 12, 1941

Dear Dr. Dodge:

Thank you for your kind letter of March 5.

We have obtained a series of cultures of N. crassa, N. sitophila, and N. tetrasperma, many of which came originally from you. We got some from Lindegren and some from Dr. Malloch at Berkley. None of these will grow in the absence of biotin apparently, and since we are very anxious to see if we can find a strain that will do this so that we can grow it on an entirely synthetic medium, we would be very grateful if you could send us N. stitophila strains you might have available. The dried ascospores would serve our puposes perfectly well. For our purposes we prefer the heterothallic forms, but it would be interesting to check homothallic ones also. If you have strains of tetrasperma and its relative (I've forgotten the specific name at the moment) we should be very glad to try them. The tetrasperma strains we have came originally from you I believe (by way of Lindegren and Malloch) so that unless you have strains that are of different origin, it is probably not worth while to test them. Do you have any cultures or old ascospores of Melanospora? I you have, we'd be grateful for a chance to try these out too.

We think there is a reasonable chance of finding Neurospora strains that will grow without biotin since Fries has shown that a number of other ascomycetes will, and Hawker has evidence that at least certain strains of Melanospora destruens will. We shall attempt to pick up local material as you suggest, with the hope that Calif. strains may have superior abilities.

There are a couple of questions I have been unable to answer satisfactorily from a rather hasty search through the literature and I wonder if you could help me. The first is the nuclear state in mature ascospores of crassa and sitiphila. Are they uni- or binucleate? Malloch told me they were binucleate but I am unable to find a published statement regarding this. The second is a similar question concerning the conidia. Here I have found statements in your papers that they are bi- or multinucleate. Malloch indicated that there was some disagreement regarding this point but again I have found no published statement that they are uninucleate. We will very much appreciate any help you can give us in settling these two questions.

We appreciate your kindness in helping us. We shall let you know of any developments that may be of interest.

Sincerely yours,

G. W. Beadle

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